# Clean Watersheds Needs Survey (CWNS) 2008



**CWNS 101** 



Michael Plastino, EPA Office of Wastewater Management

# Seminar Logistics / Ground Rules

If you encounter problems with WebEx, call their Help Line at 1-866-229-3239

Oral questions can only be asked during designated question and answer periods.

Written questions can be submitted at anytime by clicking the question icon.



This training is being recorded.

# Seminar Participants

Local / Regional Governments – 47

Consultants – 7

State Governments

CWNS Novice – 32

CWNS Experienced – 20

Other State Government – 7

#### **EPA**

CWNS Regional Coordinators – 3

Other - 3

Other Federal Government - 4

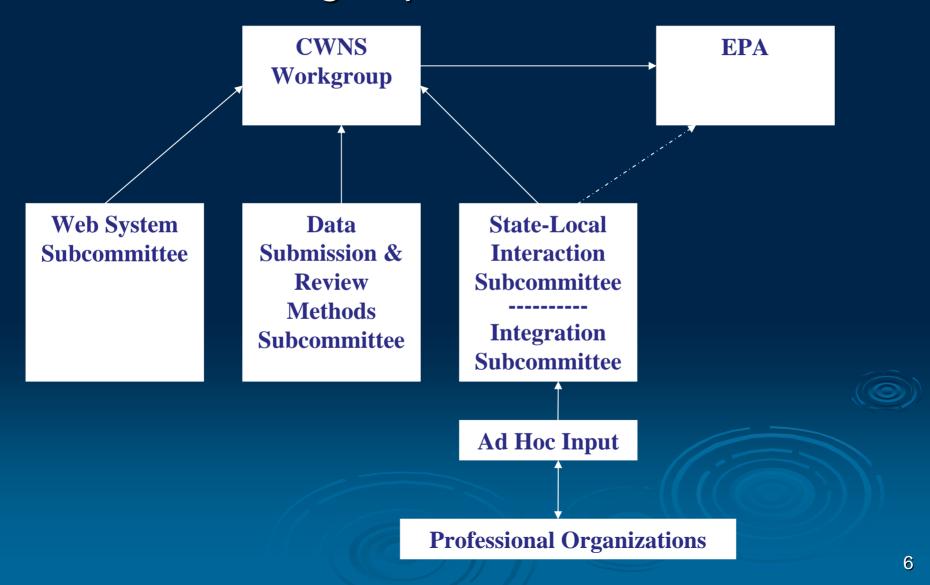
#### Seminar Overview

- 1) Acknowledgements
- 2) CWNS History & Fundamentals
- 3) CWNS 2000 & 2004 Results Overview
- 4) CWNS 2008 Survey Methods
- 5) CWNS 2008 Internet Data Entry System

# 1) Acknowledgements

## Acknowledgements

#### CWNS Workgroup and Subcommittees



# CWNS Integration Subcommittee (October 2005 – March 2006)

Jon Bernreuter, AZ Ketan Patel, N.J. Mark Hubbard & Steve Tsadwa, NC Ping Yee, MA Emily Morris, WA Ray Kvalheim, EPA Region 2 Catherine King, EPA Region 3 Adrienne Rivera, EPA Region 8 Jim Preston & Michael Plastino, EPA Headquarters Contractor Support: Jon Harcum, TetraTech

# Data Submission & Review Methods Subcommittee (October 2005 – August 2007)

Nancy Bowser, ID Tom Webb, MS Jason Denno & Terry Deuel, NY Ketan Patel, David Shu & Scott Shymon, NJ Rosalie Brodersen, Teresa Koon & Carrie Grimm, WV Ray Kvalheim, EPA Region 2 Bill Tansey, EPA Region 5 Kelly Beard-Tittone, EPA Region 7 Michelle Tucker, EPA Region 10 Karen Fligger and Michael Plastino, EPA HQ Contractor Support: Alejandro Escobar, TetraTech

# Web System Subcommittee (October 2005 – December 2007)

Greg Pope, DE Meg Klepic, OH

Jill Bertelson, KY David Breau, ME

Jeff Albrecht, CA Jon Bernreuter, AZ

Doug Garrett & Kirby Finders, MO

Ketan Patel & Scott Shymon, NJ

Susanne Mann, EPA Region 6

Jim Preston, Karen Fligger & Michael Plastino, EPA HQ

Contractor Support:

Jeff Kipers, Raj Lingam & Michelle Gouws, Lockheed Martin

Jon Harcum, TetraTech

# State-Local Interaction Subcommittee (May 2006 – April 2008)

David Breau, ME Emily Morris, WA Meg Klepic, OH Ketan Patel & Scott Shymon, NJ Mark Hubbard & Steve Tsadwa, NC Susanne Mann, EPA Region 6 Karen Fligger & Michael Plastino, EPA Headquarters **Contractor Support:** Jon Harcum, TetraTech

Raj Lingam & Michelle Gouws, Lockheed Martin

#### Ad Hoc Advisors

Timothy Houghton, Honolulu, HI, National Association of Clean Water Agencies (NACWA)

Jimmy Kemp, Winston & Newton Counties, MS (LGAC)

Ifty Khan, Fairfax County, VA

Dorothy O'Brien, Peioria, AZ, Western Coalition of Arid States (WESTCAS)

Karen Pallansch, Alexandria, VA

Mohsin Siddique, Washington, DC

Matt Singleton, Grapevine, TX, American Public Works Association (APWA)

Bruce Tobey, Gloucester, MA, Local Government Advisory Committee (LGAC)

Chris Hornback, NACWA Headquarters

Steve Via, American Water Works Association Headquarters

Required by Clean Water Act (CWA) Sec. 516

Joint Effort between EPA & States

Conducted Every 4 Years since 1992, following inception of Drinking Water Needs Survey (every 2 years 1972-1992)

#### Closely Related to

- Construction Grants Program (1972-1986) CWA Sec. 205 -> Sec. 516
  - -> Publicly Owned Treatment Works
- State Revolving Fund Program (1988-Present) CWA Sec. 604 -> Sec. 205 -> Sec. 516
  - -> Publicly Owned Treatment Works
  - Stormwater, Nonpoint Source & Estuary
     Management Projects

     CWNS 2004 Needs are 'Generally SRF Eligible'

#### Sec. 205(a) excerpt

"Allotments...shall be made only in accordance with a revised cost estimate made and submitted to Congress in accordance with Sec. 516 of this Act and only after such revised cost estimate shall have been approved by law specifically enacted hereafter."

#### Sec. 516 excerpt

"The EPA Administrator, in cooperation with the States, ...shall make (a) a detailed estimate of the cost of carrying out the provisions of this Act"; (b) a detailed estimate...of the cost of construction of all needed publicly owned treatment works in all of the States..."

#### **CWNS 2004 Needs Categories**

Section 212 Wastewater Treatment & Collection

Report -Section 516(b) I: Secondary wastewater treatment

II: Advanced wastewater treatment

III-A: Infiltration/inflow correction

III-B: Sewer replacement/rehabilitation

IV-A: New collector sewers appurtenances

IV-B: New interceptor sewers and appurtenances

X: Recycled water distribution

Section 212 Wet-weather

Report -Section 516(b) V: Combined sewer overflow correction

VI: Storm water management programs

Sections 319 &

320

Non-

point

Source

Pollution

Control

Report -Section 516(a)

#### Category VII – Nonpoint Source Control

A: Agriculture (cropland)

B: Agriculture (animals)

C: Silviculture

D: Urban

E: Ground water protection

F: Marinas

G: Resource extraction

H: Brownfields

I: Storage tanks

J: Sanitary landfills

K: Hydromodification

L: Individual / decentralized sewage treatment

#### Information in CWNS

Capital Needs for projects that address water quality or water-related public health problems

Approximately 33,000 Facilities/Projects

50% NPDES Wastewater Treatment Plants

25% Wastewater Collection Systems

20% Nonpoint Source Projects

5% Stormwater Projects

#### Information in CWNS

Project costs & documentation sources

Facility / Project location & contact information

Facility current and projected Populations served Design and actual flows Effluent levels

Facility unit process & NPS best management practices (BMP) data

#### **CWNS Data Uses**

Assists Congress and state legislatures in budgeting efforts

Helps measure environmental progress & contributes to academic research

Informs the public

Assists with program implementation

Loading analyses, NPDES permit writing, SRF Project Prioritization...

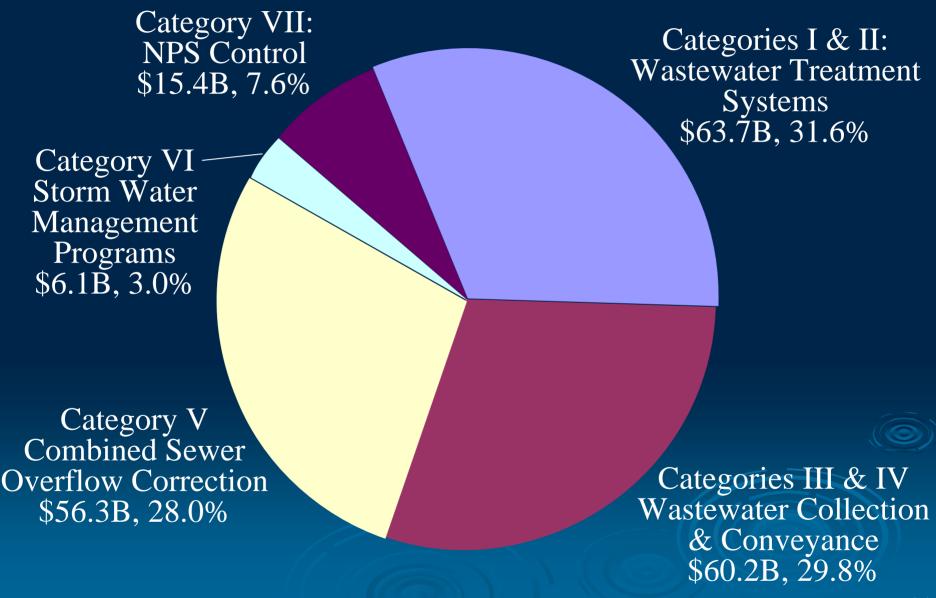
# Questions

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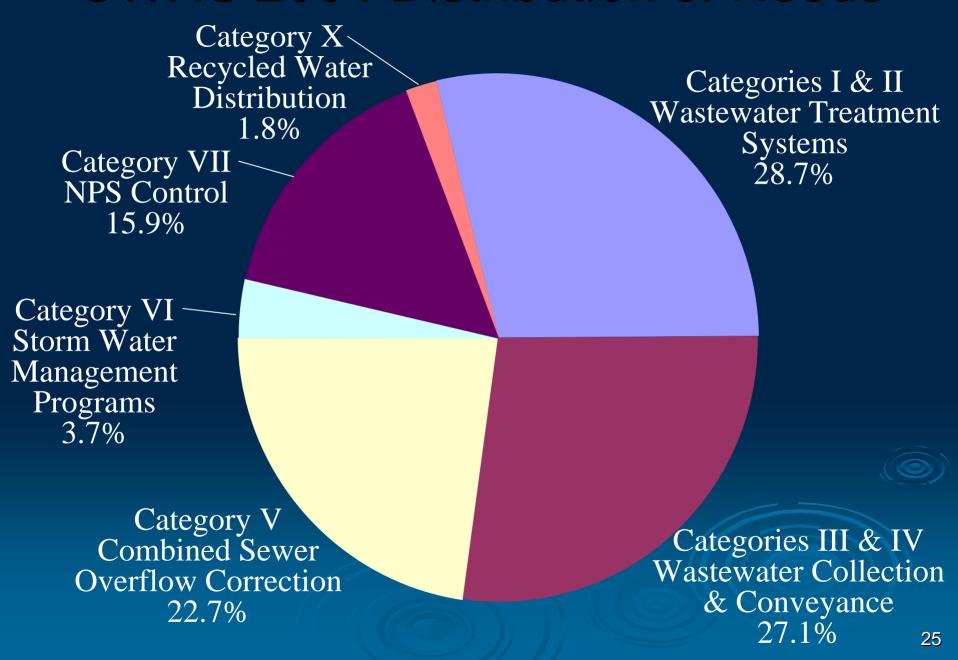
Remember--Written questions can be submitted at anytime by clicking the question icon.

# 3) CWNS 2000 & 2004 Results Overview

#### CWNS 2000 Distribution of Needs



### CWNS 2004 Distribution of Needs



# **CWNS 2004 Main Findings**

Largest needs categories
Wastewater treatment (28.7%)
Wastewater collection/conveyance (27.1%)

Combined sewer overflow correction (22.7%)

Categories with largest % increases
Nonpoint Source, Wastewater treatment,
Sewer repair/replacement

Wastewater collection & treatment needs
Rehabilitation of aging infrastructure
Meeting more protective water quality standards
Adding new facilities & increasing treatment
capacity

# **CWNS 2004 Main Findings**

NPS needs and stormwater management needs are still under reported

10% of WW collection & treatment needs, and 2/3 of onsite/decentralized needs are in small communities

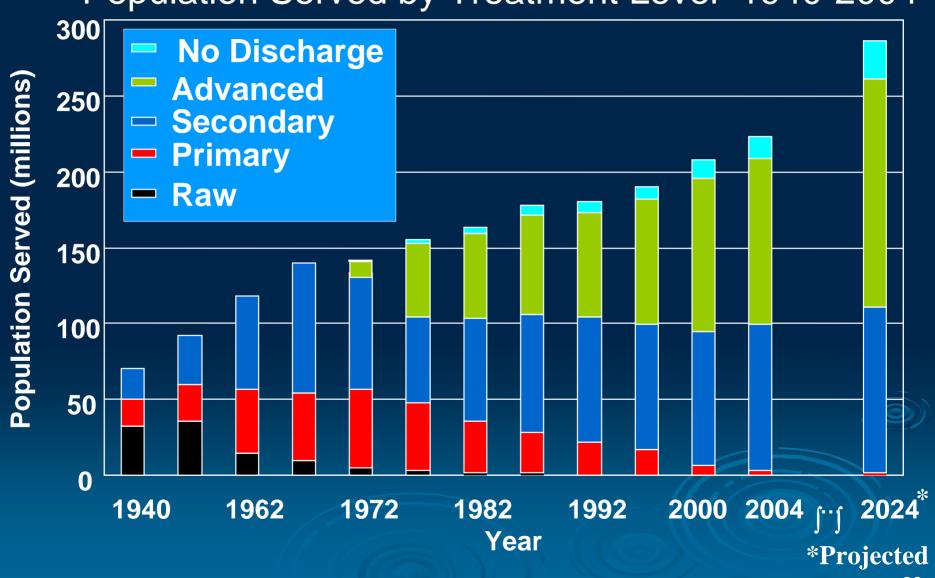
90% of needs are in 35% of watersheds

35% of needs are in designated National Estuary Program areas

49% of needs are in coastal watersheds

# **CWNS 2004 Main Findings**

Population Served by Treatment Level 1940-2004



#### **CWNS** Public Data Access

Data is at WWW.EPA.GOV/CWNS

CWNS 2000 data is currently available

All CWNS 2004 data will be available after Report submitted to Congress

Data, available in EPA Office of Water's Ask WATERS internet tool, can be:

Accessed via easy web interface

Compared with other water program data

Organized into various charts, tables, and maps



**CWNS Home Page** 

CWNS Basics

CWNS 2008

#### **CWNS 2004**

- Report to Congress
- Data

#### CWNS 2000

- Report to Congress
- Data

#### 1996 CWNS

- Report to Congress
- Data

Where You Live

**Data Dictionary** 

#### Clean Watersheds Needs Survey (CWNS)

Search: O All EPA O This Area Contact Us | Print Version

GO

You are here: EPA Home » Water » Wastewater » CWNS » CWNS 2000 Data

#### CWNS 2000 DATA

There are three easy ways to access CWNS data.

#### 1. Facility Fact Sheet

Summarizes all CWNS data available for a specific waste water treatment facility or nonpoint source (NPS) pollution prevention project.

#### 2. Ask WATERS Simple Query Tool

The Ask WATERS Simple Ouery Ouestions allows you to access data for wastewater facilities stormwater management programs, and NPS pollution control projects in a watershed, state, region, or the entire nation.

Nine Ask WATERS Simple Query Questions that summarize data from CWNS are:

- How many CWNS 2000 facilities and projects have needs and in what categories are their needs?
- 2. What CWNS 2000 facilities and projects have needs documented to federal standards?
- What are the current and projected flows for publicly owned wastewater treatment facilities?
- 4. How many people are served by publicly owned wastewater treatment facilities?
- Combination of Ouestions #2 and #3
- Combination of Questions #2 and #4
- Combination of Questions #2, #3, and #4
- What are the discharge methods and locations for CWNS 2000 facilities and projects?
- What are the names and locations of publicly owned wastewater treatment facilities currently in operation?

#### Description of CWNS Data

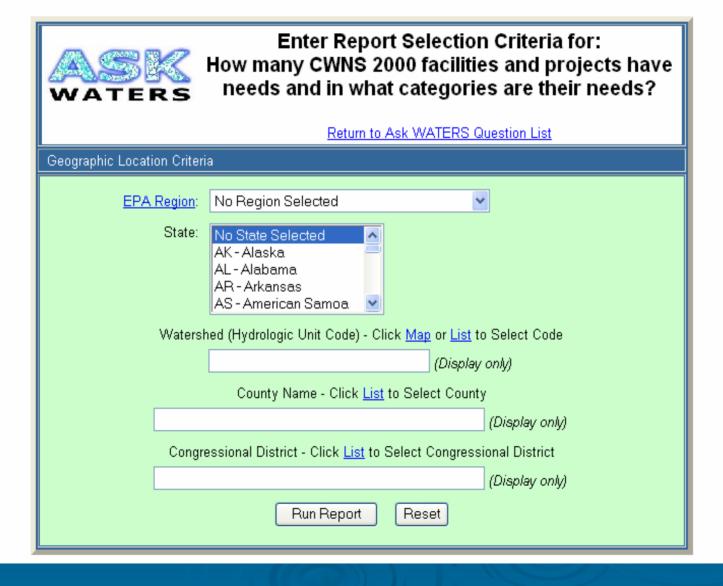
- Dictionaries: Data User's. Dictionary and Technical Data Dictionary (in EPA's Environmental Data Registry)
- Overview: Ask WATERS internet tool (used for data reports on this web site)



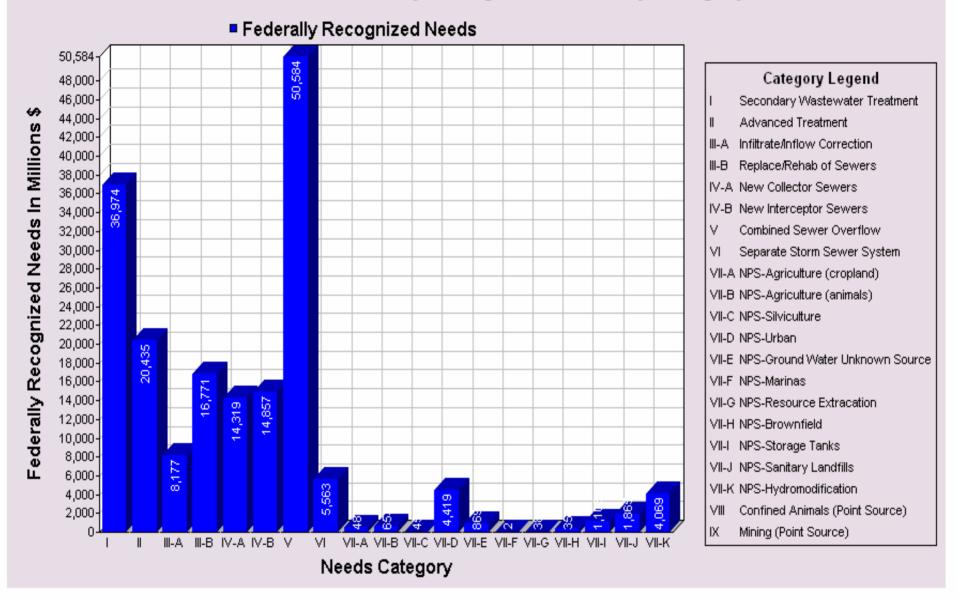
#### Watershed Assessment, Tracking Results System

Recent Additions | Contact Us | Search: G0

EPA Home; Water; WATERS; Tools; Ask WATERS

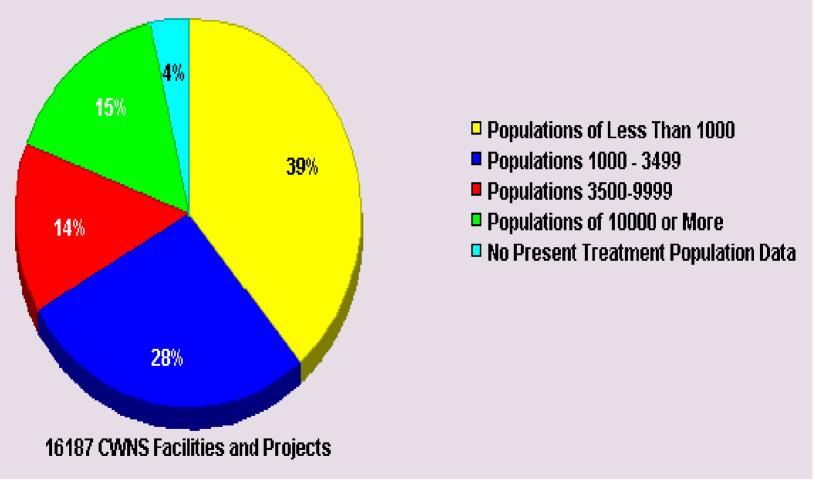


#### CWNS Total Federally Recognized Needs by Category



Click on any bar to get a detailed facility listing

#### Percentage of CWNS Facilities and Projects by Present Population Served Size



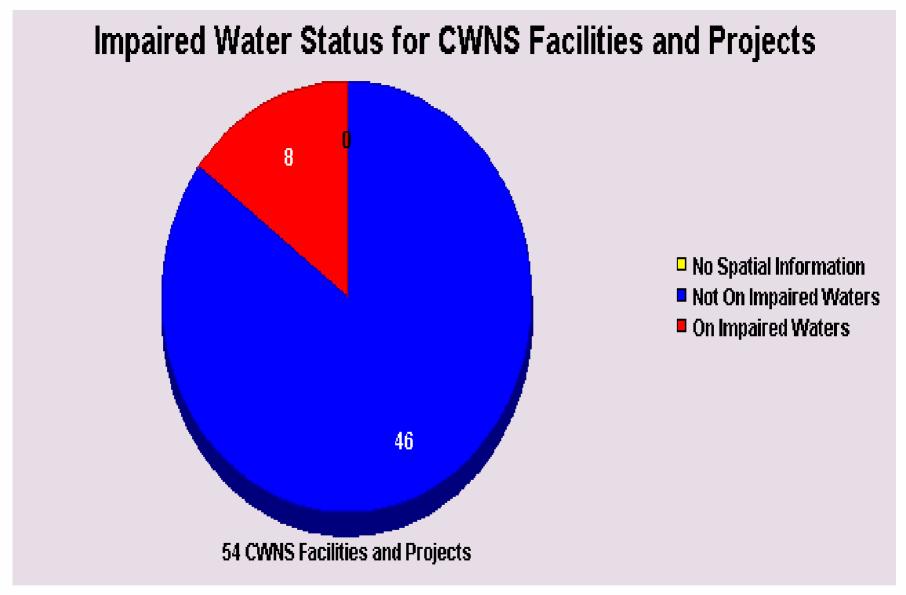
Click on any pie slice to get a detailed facility listing.



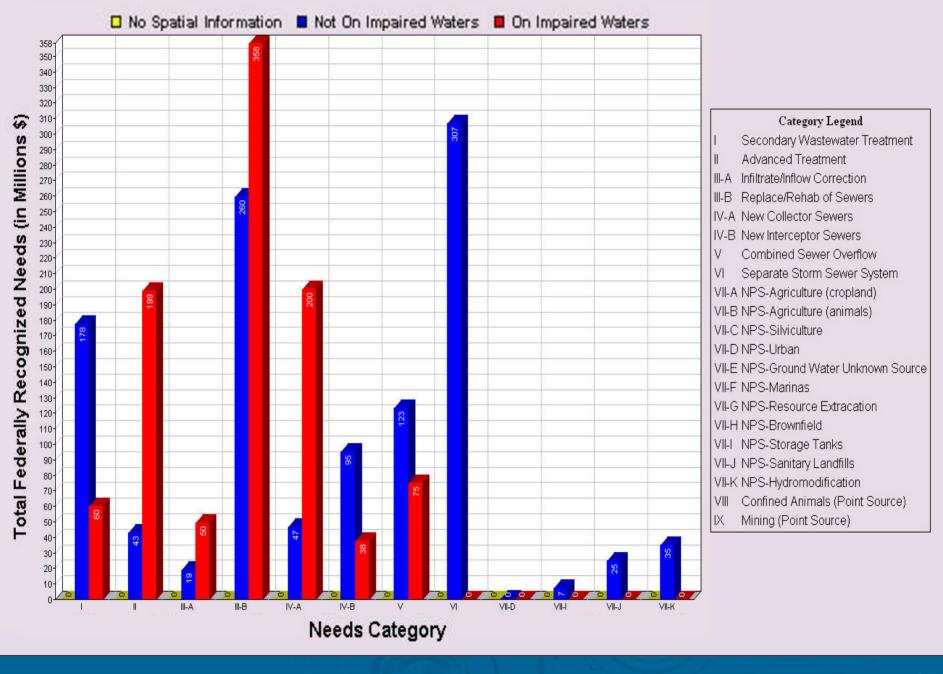
#### Enter Report Selection Criteria for: How many and what categories of CWNS 2000 facilities and projects, documented to federal standards, are located on impaired waters?

Return to Ask WATERS Question List

Geographic Location Criteria	
EPA Region:	No Region Selected
State:	No State Selected  AK - Alaska  AL - Alabama  AR - Arkansas  AS - American Samoa   ✓
Watershed (Hydrologic Unit Code) - Click <u>Map</u> or <u>List</u> to Select Code	
	(Display only)
Run Report Reset	



Click on any pie slice to get a detailed facility listing.





### Watershed Assessment, Tracking & Environmental Results System

Recent Additions | Contact Us | Search:

EPA Home > Water > WATERS > Tools > Ask WATERS

### Ask WATERS Results

Documented Needs Exist, HUC = 02060003, Needs Category = II, Overlap Category = 1

Return to Ask WATERS Question List Return to Report Selection Criteria Screen

Important Report Information

CWNS Facilities with Approved Federal Needs

### **CWNS Facility Listing**

### Page No. 1

	REGION	<u>STATE</u>	COUNTY	CWNS_NUMBER	<u>FACILITY</u>	<u>AUTHORITY</u>	CWNS_REPORT	CWNS_MAP	CATEGORY CODE	CATEGORY_NAME	NEED_AMT	NEEDS	01
,	3	MH	Anne Arundel	24000003001	COX CREEK WWWTD		•	Map CWNS Facility	II	Advanced Treatment	\$16,488,000	\$46,377,000	No
	3	MD	Carroll	24000005003	District	ILLUUNITY		Map CWNS Facility	II	Advanced Treatment	\$2,928,000	\$27,031,000	No
						MOUNT							

CWNS#: 24000003001 Facility: COX CREEK WWTP

NPDES: MD0021661

Review Status: Federal Needs (\$000):

HΑ

10/16/01

\$46,377

Tribe: No

System Name:

Location (Point of Record)

County, State: Anne Arundel MD

Congressional District: 2401

Within Tribe Territory: Nο

Latitude/Longitude: 39.1739 N / 76 5347 W

Watershed: Gunpowder-Patapsco.

NHD Index:

Point of Contact

Name:

Authority: ANNE ARUNDEL COUNTY DPW

Address:

Phone: Fax:

Email:

**Facility Description** 

<u>Nature</u>	<u>Present</u>	Projected	Change(s)
Collection: Separate Sewers	Υ	Υ	Expansion
Collection: Separate Sewers	Υ	Υ	Rehabilitation
Collection: Separate Sewers	Υ	Υ	Replacement
Treatment Plant	Υ	Υ	Increase Level Of Treatment
Treatment Plant	Υ	Υ	Process Improvement

Permit(s) Number Type \*indicates NPDES Permit MD0021661\* Discharge















### EnviroMapper for Water



# Questions

Your phones will now be taken off mute, so that you may ask questions. Please mute your phone or remain quiet so that everyone can hear the question.

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# 4) CWNS 2008 Survey Methods

## "Official" Needs

"Official" Needs are defined as Capital costs for Needs that:

Meet CWNS documentation criteria, and

Fall within CWNS categories, with Section 212-related Needs limited to publicly owned facilities

## "Official" Needs

CWSRF eligibility is no longer required for a project to be an "Official" need

"Official" Needs are in the main body of the Report to Congress

Other needs are in appendices, including:

Capital costs for <u>privately</u> owned wastewater collection and treatment plants

Planning and operations & maintenance costs

CWSRF eligible subset of "Official" needs

# Documentation Criteria for "Official Needs"

- 1. Description of the water quality or public health problem
  - Needs
- 2. Location of the problem
- Solution to the problem
- Cost of the solution
- Basis for the cost
- Total cost
- Current Documentation

Costs

## Commonly Used Document Types

Capital Improvement Plan (37%)

Facility Plan (15%)

State Approved Area-Wide / Region Basin Plan (8%)

Final Engineer's Estimate (5%)

CWSRF Intended Use Plan (5%)

## CWNS Cost Curves

Combined Sewer Overflow

Secondary & Advanced Treatment

**Pipes** 

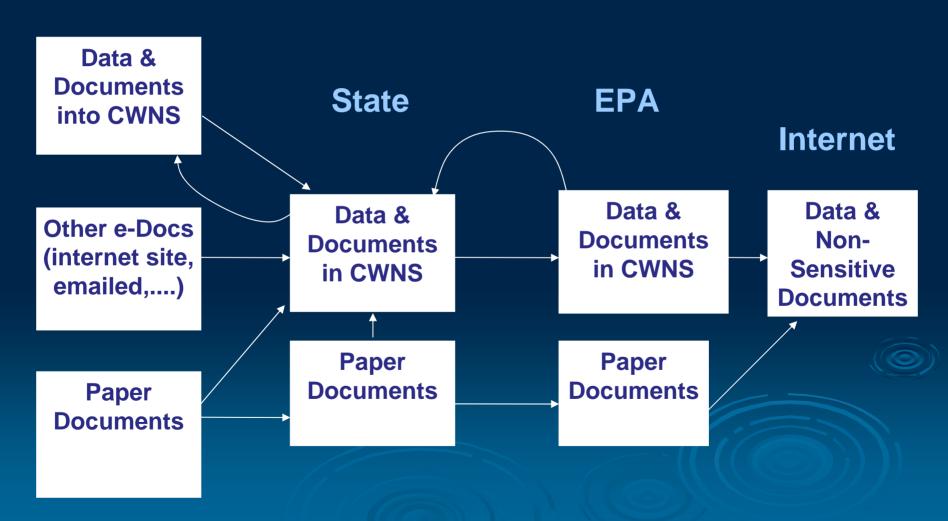
New

Rehabilitation/Replacement

Septic System
Individual
Cluster

# CWNS 2008 Data Entry Roles

### Local



# CWNS 2008 Data Entry Roles Local Entities

Provide updated data and documents to State CWNS Coordinator

Data Update Methods

Mark up paper copy of CWNS Fact Sheet sent by State

Mark up data in Internet based CWNS Fact Sheet

# CWNS 2008 Data Entry Roles State CWNS Coordinators

Use Local input / other data to update Needs

Ensure CWNS data and documentation requirements are met

Submit data and documentation for EPA Review

Work with Local entities and others as needed to respond to EPA Review

## Data Quality Assurance

### Contractor Review Team checks:

Data Requirements

Data Consistency with Document Information

Documents meet Documentation Criteria

SRF Eligibility (spot checks)

## Appeals

**CWNS** Regional Coordinator

**EPA Headquarters CWNS Team** 

EPA Headquarters / Regions SRF Panel

# Questions

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# 5) CWNS 2008 Internet Data Entry System

## New Internet Data Entry System

Built in EPA Portal, integrated with

NPDES permit data

Impaired waters data

**CWSRF** benefits data

Online mapping tool

Ask WATERS reporting tool

Allows local & secondary state interaction with State CWNS Coordinators on data/document submittal and updating

## New Internet Data Entry System

Submittal and mark up of documents

Fact Sheets
Official versions
Local Mark Up version

User interface customized based upon User (Local, State, EPA)
Need Type (POTW, Decentralized, NPS)
Need Status (Local Feedback Requested, State Update in Progress, EPA Review Requested,...)



Clean Watersheds Needs Survey (CWNS)

GO O All EPA O This Area Search: Contact Us | Print Version You are here: EPA Home » Water » Wastewater » CWNS » CWNS 2008 » Login/Registration

#### **CWNS 2008 CWNS Home Page**

The next CWNS will be conducted in 2008. One of the primary goals of the 2008 CWNS is to make it easier for states and local communities to submit their information by:

**CWNS Basics CWNS 2008** 

- Moving the data entry system to the Internet to enable the direct entry of Needs by local communities and various state agencies.
- Integrating data with other EPA programs.

**CWNS 2004** 

#### - Report to Congress - Data

Data collection will occur from January 17, 2008 to September 17, 2008. Detailed quidelines for 2008 data submission are expected to be

#### **CWNS 2000**

available in July 2007. For new information on the 2008 CWNS, sign up for quarterly updates by e-mail (cwns@epa.gov).

- Report to Congress - Data

To establish an account on the CWNS system click here

#### 1996 CWNS - Report to Congress

- Data

User Name: mklepic

Where You Live

Password: ••••••

Login

Data Dictionary

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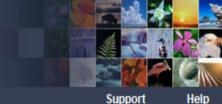


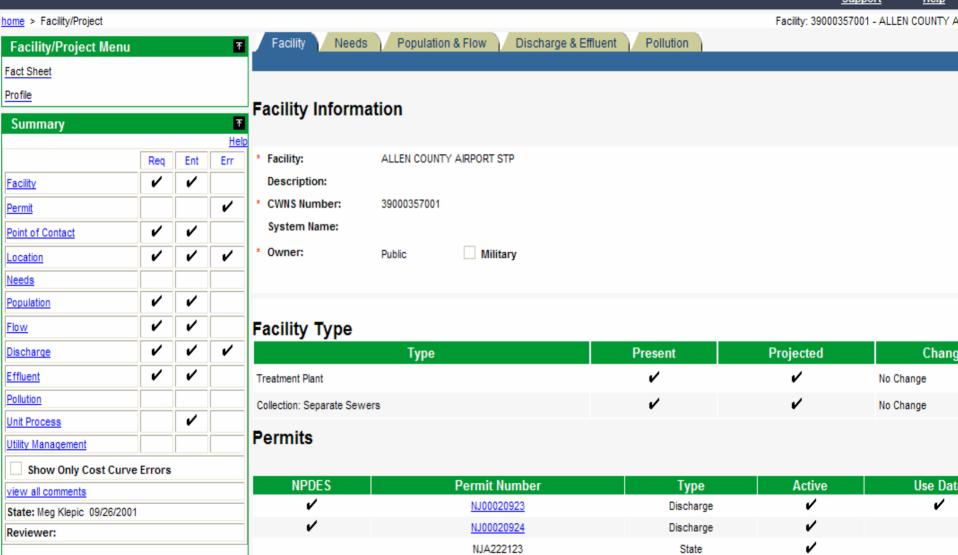


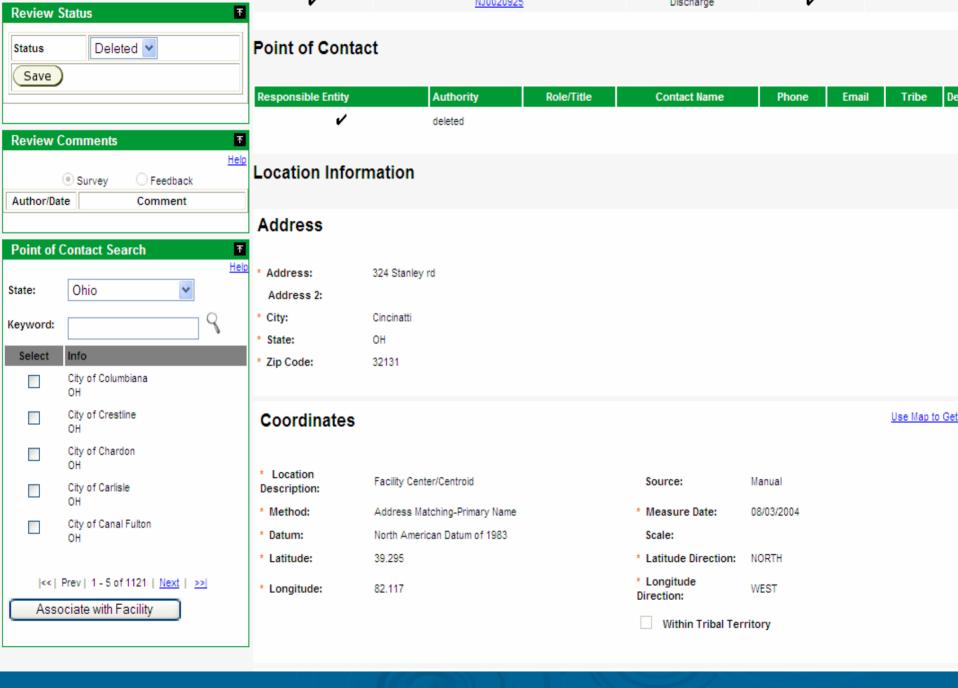
Search		不	Facility/	Project List					
	18	<u>He</u>	p			All Facilities			
eyword			Select	<u>CWNS</u> <u>Number</u>	Facility/Project Name	<u>Status</u>	County	Feedback Status	
Advanced S	Search	不		39000357001	ALLEN COUNTY AIRPORT STP	Deleted	Allen		
		Hel		39000356001	ALLEN INN STP	Deleted	Allen		
		^		39006000093	ASHTABULA RIVER WS	Deleted			
Review	Federal Accepted			39000014001	Aberdeen WWTP & Sewers	Federal Accepted	Brown		
Status	Federal Review Requested			39000021001	Ada WWTP & Sewer System	Federal Accepted	Hardin		
	Federal Review Correction	~		39007420008	Adams Acres Subdivision	Federal Accepted	Sandusky		
acility/Project				39010010001	Adams County NPS	Federal Accepted	Adams		
lame				39000049001	Addyston Collection System	Deleted	Hamilton		
		^		39000010001	Adelphi Collection System	Federal Accepted	Ross		
Overall Type	Decentralized/ISDS Nonpoint Source			39000063001	Adena WWTP & Sewer System	Federal Accepted	Jefferson		
	Storm Water	v		39002892003	Airport Industrial Park WWTP	Federal Accepted	Fulton		
				39000084002	Akron MS4	Deleted	Summit		
Authority				39000084001	Akron WWTP & Sewers	Federal Accepted	Summit		
System Name		6		39001199017	Alamo Heights WWTP & Sewers	Federal Accepted	Butler		
-		-		39000091001	Albany WWTP and Sewer System	Federal Accepted	Athens		
County/FIPS		60		39000331002	Albany/Athens Corridor Sewers	Federal Accepted	Athens		
Vatershed		6		39000121001	Alexandria Septic Tanks	Federal Accepted	Licking		
otal Needs				39000012001	Alger WWTP & Sewers	Federal Accepted	Hardin		
> 🗸	(\$, Federal, Adjuste	d)		39000355001	Allen Acres WWTP & Sewers	Deleted	Allen		
				39010030001	Allen County NPS	Federal Accepted	Allen		
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han			Select All	Clear All   Import	EXPORT			<   Prev   1 - 20 of	1906

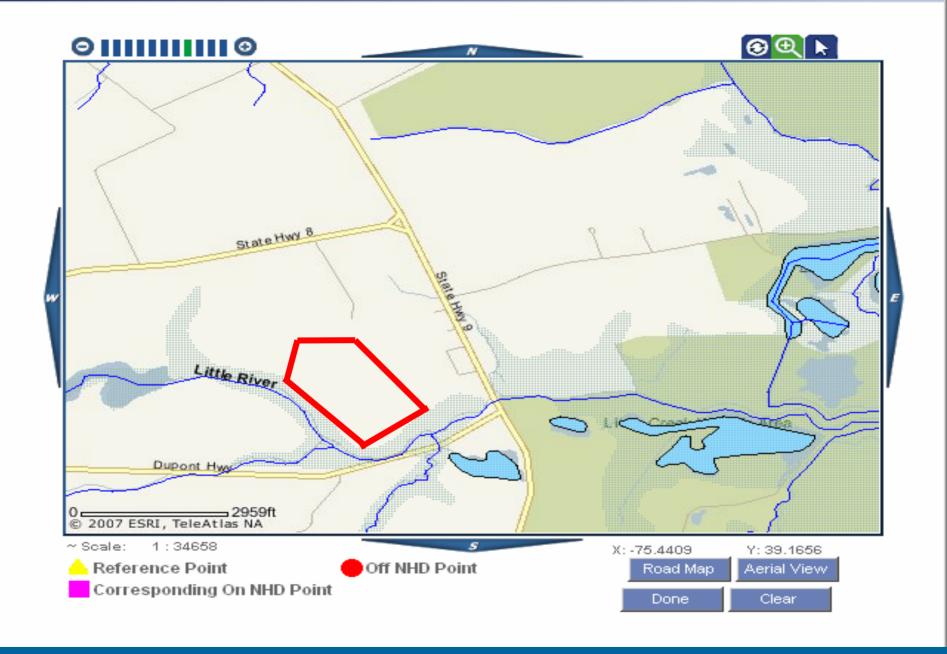
Federal Review Requested | Local Assigned

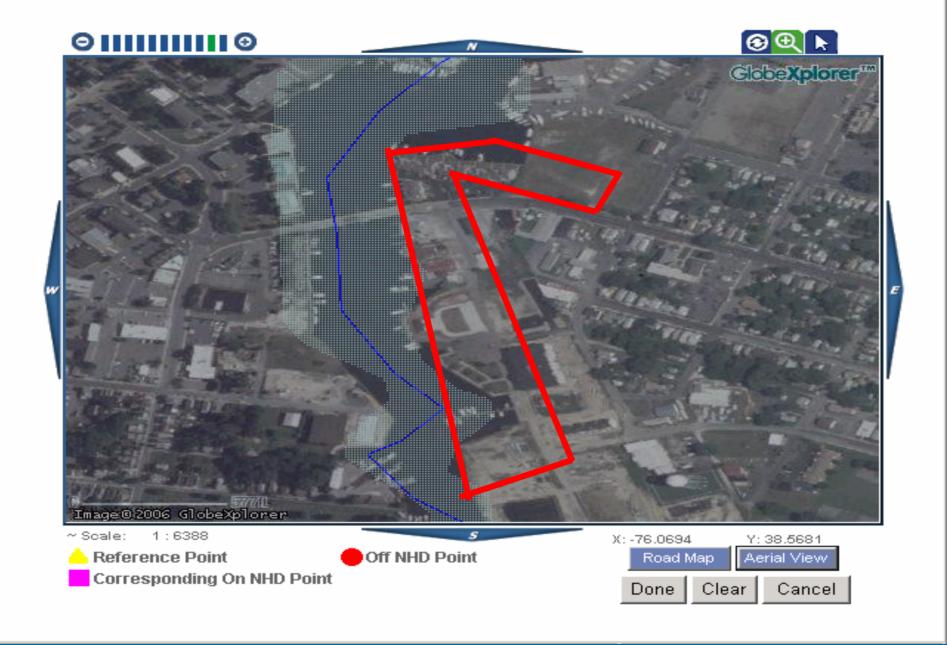
















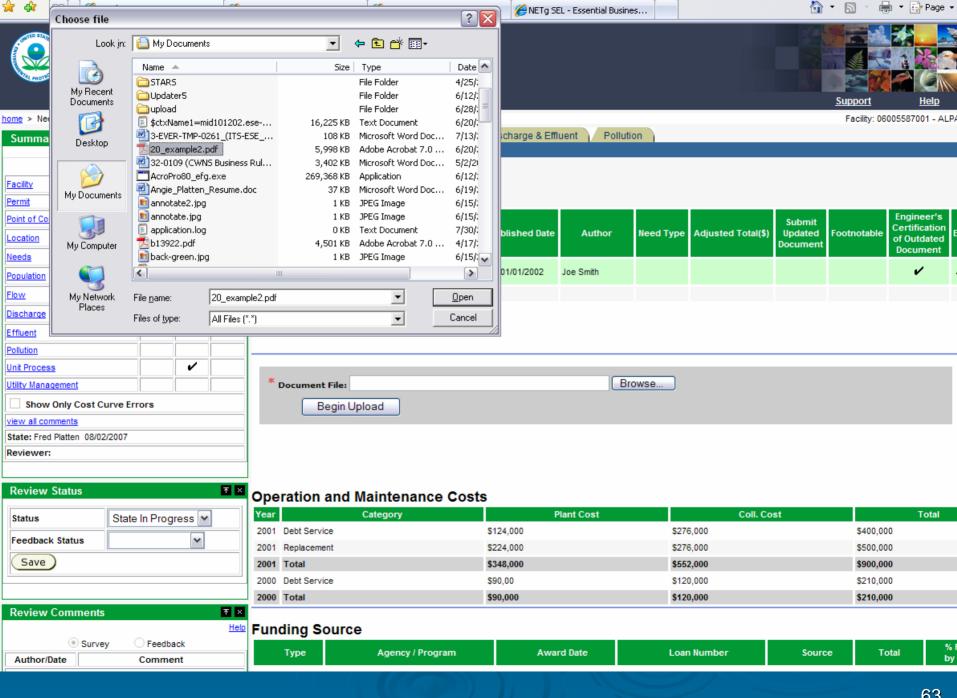


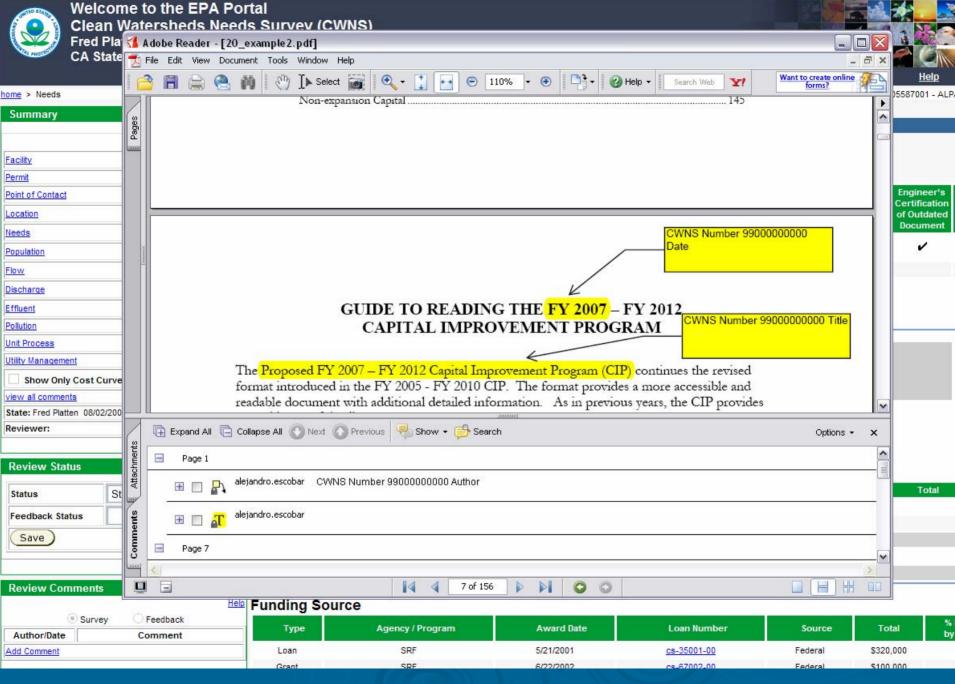
### **Operation and Maintenance Costs**

Year	Category	Plant Cost	Coll. Cost	Total
2001	Debt Service	\$124,000	\$276,000	\$400,000
2001	Replacement	\$224,000	\$276,000	\$500,000
2001	Total	\$348,000	\$552,000	\$900,000
2000	Debt Service	\$90,00	\$120,000	\$210,000
2000	Total	\$90,000	\$120,000	\$210,000

#### Funding Source

	Туре	Agency / Program	Award Date	Loan Number	Source	Total	% Funded by CWSRF
	Loan	SRF	5/21/2001	cs-35001-00	Federal	\$320,000	100
	Grant	SRF	6/22/2002	<u>cs-67002-00</u>	Federal	\$100,000	60%
	Loan	State	10/10/07	abb-001-1234	Private	\$20,000	
ı	Total					\$420,000	

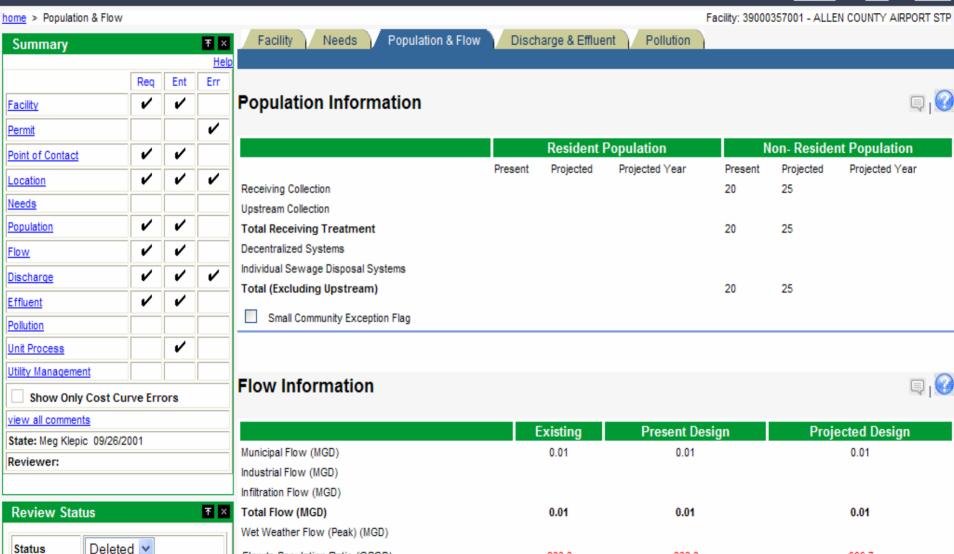






Flow to Population Ratio (GPCD)





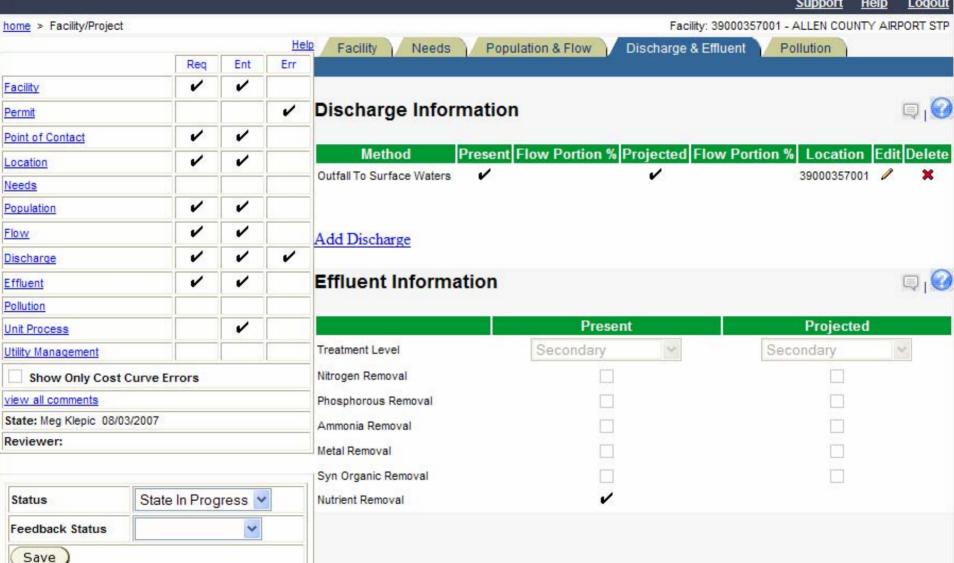
833.3

833.3

666.7

# Welcome to the EPA Portal Clean Watersheds Needs Survey (CWNS) Meg Klepic OH State User







Facility

Needs

**Pollution Problems** 

Population & Flow

Discharge & Effluent

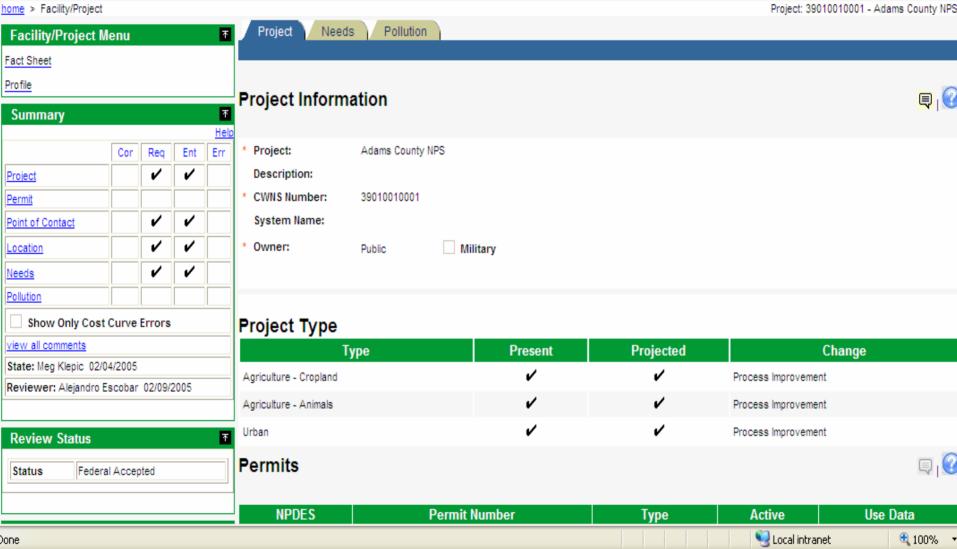


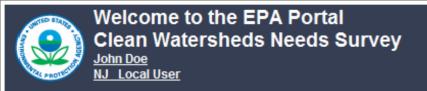
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Review	Status	ŢΧ
Review	Comments	ŢΧ
Impaire	ed Waters Search	Τ×
<b>⊙</b> All 6	tance(Miles) Watershed  TDML Completed TMDL	Needed
Select	Information	
	List ID: OH05090101 030 Water Body Name: RACCOON (UPSTREAM HEWETT FORK TO DOWNSTREAM ELK FORK) No TMDLs Entered   <<  Prev   1 - 1 of 1   Ne	

home > Pollution





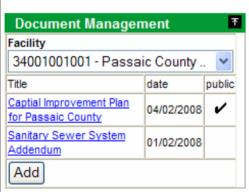


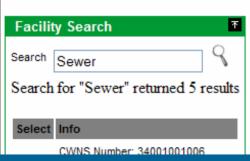


Logout Home Help

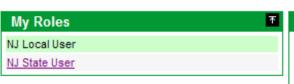


Facility/Project L	ist	ক
CWNS Number	Facility/Project Name	Feedback Status
34001001001	Passaic County Waste Water Treatment Plant	Local In Progress
34001001002	Whippany River Watershed	Local In Progress
34001001003	Westside Sewer System	State Review Requested
-	New Passaic County Waster Water Treatment Plant	State New Requested

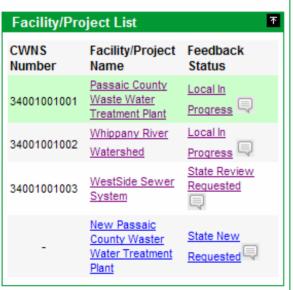




Logout Home









### Facility: Passaic County Waste Water Treatment Plant

### Facility Feedback Sheet / Edit State Fact Sheet Pack Sheet



CWNS Number: 34001001001





Passaic County Waste Water Treatment **Facility Name:** 

Plant

Local In Progress

Review Status: State in Progress

MO State:

Federal Needs: \$5,699,000

System Name:

Feedback

Status:

### Facility Type

Туре	Present	Projected	Change
Collection: Separate Sewers	~	~	Expansion Rehabilitation
Collection: Combined Sewer	~	~	Replacement Expansion
Individual On-Site System Area	•	~	Abandonment
Treatment Plant	~	•	Process Improvement

### Responsible Entity

Name	Authority	Address	Phone	Email
John Franklin	Kirksville, City of			

# **Additional Training**

CWNS 2008 Kickoff Meeting Methods and Rules Data Entry System

Webcasts posted on Internet

Data Entry System training videos on Internet

Additional Webcasts (early 2008) for Local Communities

# Questions

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Remember--Written questions can be submitted at anytime by clicking the question icon.

## Contacts & More Information

Michael Plastino, US EPA 202-564-0682 or <u>plastino.michael@epa.gov</u>

Karen Fligger, US EPA 202-564-2992 or <u>fligger.karen@epa.gov</u>

Sign up for CWNS updates, email <a href="mailto:cwns@epa.gov">cwns@epa.gov</a>

### www.epa.gov/cwns

Includes list of state & regional coordinators

News about CWNS 2008

Access to CWNS data and Reports to Congress